## SIR GEORGE WILLIAMS UNIVERSITY

### INTERNAL MEMORANDUM

To:

Engineering Faculty Council

DATE: January 31, 1969

FROM:

N.F. Jennings, Secretary of Engrg. Executive Committee

SUBJECT:

Proposed Organizational Structure to Rationalize Computer Science at SGWU

The attached document was prepared by the Executive Committee at the request of Dean Bordan. It contains:

- 1. A review of the development of Computer Science courses, and the Computer Center.
- 2. A statement of problems related to the present lack of a clear organizational structure to administer, develop and establish priorities for service courses in Computer Science.
- 3. A suggested Interim Organizational Structure to Rationalize Computer Science at SGWU.
- 4. Suggested terms of reference of a new Computer Science Committee.

The Executive has agreed to recommend to E.F.C. at the February meeting that a Computer Science Committee be established according to the structure and terms of reference listed in Parts III and IV of the attached document.

In view of the need to proceed without delay with advertising for new Faculty members to teach Computer Science courses, the Executive is proceeding with these duties according to Section III of the attached document. A copy of the advertisement sent to various universities is attached.

Morman Fjennings

### I. BACKGROUND

- 1963 IBM 1620 computer purchased as a University facility.
- Computer programming courses offered to third year Engineering students and as an elective to Science students (Math 471).
  - Graham Martin, Assistant Professor of Engineering, responsible for the teaching of the computer courses and the operation of the computer.
- Computer Centre formed and identified as a separate budget item. Graham Martin appointed Director of the Computer Centre. Computer Centre made responsible for teaching of computer courses.
- 1966 Move to Hall Building.
- CDC 3300 computer purchased as University facility.
  - Computer Programming course for Engineering students moved to 2nd year (E214). Math 471 designated as CS471. Computer Programming courses were offered to more generally service the needs of non-engineering students. These were designated Computer Science 211 and 212. (See Eng. Fac. Council minutes of November 18, 1966). The number of students enrolled in Computer Science courses was as follows:
    - CS211 94 day (1 section); 184 evening (2 sections); 94 summer (1 section.
    - CS212 81 day (1 section); 133 evening (2 sections); 94 summer (1 section);
    - E214 116 day (1 section); 50 evening (1 section).
    - E371 52 day (1 section).
    - CS471 27 day (1 section); 52 evening (1 section).
  - Graham Martin proposed a B.Comp.Sc. programme for 1968. Faculty of Engineering Committee established to evaluate above proposal (October 1967).
  - On the recommendation of the Computer Science Evaluation Committee (Joint Committee with the Simulation Committee), the Engineering Faculty Council approved four of the Computer Science courses (CS410, 411, 420, 430) in November 1967. Graham Martin assured the Evaluation Committee that these four courses were useful as Computer Science service courses even if the B.Comp.Sc. programme was not approved.

- Creation of the post of Vice-Principal Administration, and Computer Science was switched from reporting to V-P Academic to V-P Administration.
- Operating staff in Computer Science increased with some of the Computer Centre personnel assisting in teaching the Computer Science courses.
- 1968
- Computer Science Evaluation Committee requested more documentation before it could make a decision on the programme which Professor Martin agreed to provide. However, the discussions indicated that a Master of Computer Science integrated with the Faculty of Engineering may be a better approach.
- Since Computer Centre budget included a faculty position, Graham Martin recommended to Dean of Engineering that Professor G. Fleming be hired as Associate Professor of Computer Science.
- This appointment was made in June, 1968 under the budget of the V-P Administration.
- The academic functions were formally separated from the Computer Centre activities and placed under the V-P Academic. This placed the academic responsibilities for computer science courses on the Dean of Engineering.
- The above change was accompanied by the transferral of some \$20,000 under account No. 930 to cover the salary of Prof. Fleming, part-time faculty, markers, etc.
- In the absence of a Computer Science department, Dean Bordan assigned Dr. Floming to the Mechanical Engineering Department. Dr. Floming was given the academic and administrative responsibility for Computer Science courses.
- Dr. Fleming prepared a five-year plan which demonstrated the need for four additional full-time faculty members to support the existing Computer Science course commitments.
- Dr. Fleming drew up a proposal for a Master of Computer Science programme and circulated it to members of the Faculty of Engineering.
- The Executive Committee decided the above proposal should not be submitted to the BGS without prior discussion in the Engineering Faculty Council.
- The EGSC in anticipation of the need to consider the M. Comp.Sc. proposal, has included it as an item for consideration in 1958/69.

- Dr. Fleming proposed four graduate courses of interest to Computer Science faculty as part of the Master of Engineering programme. These courses were approved by the EGSC for submission to the BGS.
- In order to meet the Computer Science commitments, one-third of the new positions for 1969/70 (2 out of 6) were committed to Computer Science by the Executive Committee.
- Student enrolments in Computer Science courses in 1968/69 are:
  - CS211 94 day (1 section); 197 evening (2 sections); 99 summer (1 section).
  - CS212 93 day (1 section), 193 evening (2 sections); 98 summer (1 section);
  - CS410 25 day, 43 evening, combined in 1 section.
  - CS411 19 day, 20 evening, 1 section each.
  - CS420 19 day, 11 evening, 1 section each.
  - CS430 32 day, 18 evening, 1 section.
  - CS471 not given.

## II. STATEMENT OF THE PRESENT PROBLEM

- 1. The commitment to existing undergraduate Computer Science courses requires the equivalent of five full-time faculty (See Computer Science Five-Year Plan).
- 2. The existing funds in account 930 are sufficient to support only one full-time faculty member and part-time instructors to teach some courses, but the services of personnel from the Computer Centre, at no charge to the academic budget, are also used.
- An organizational structure is needed to administer, develop and establish priorities for service courses in Computer Science.
- 4. Although a M.Comp.Sc. programme will be considered, it is realized that at least two years will be required before its possible approval by BGS.

# III. SUGGESTED INTERIM ORGANIZATIONAL STRUCTURE TO RATIONALIZE COMPUTER SCIENCE AT S.G.W.U.

The following is proposed as an organizational structure for faculty in Computer Science until a decision on a Computer Science Programme is reached.

- The Faculty of Engineering accepts the responsibility for developing and administering Computer Science at this University.
- The Executive Committee be assigned the responsibility for administering, developing and establishing priorities for Computer Science courses at SGWU.
- 3. The existing course offerings be reviewed and that these be limited for the 1969/70 session to courses that can be offered satisfactorily by the present one full-time faculty member and the two additional new faculty members plus some part-time instructors.
- 4. The Executive Committee undertake to hire the new faculty members and part-time instructors to service Computer Science courses.
- 5. If satisfactory faculty members can be found, the Executive Committee will assign them to appropriate departments along with some Computer Science courses for the purposes of administration.
- 6. A separate budget (930) will be maintained and administered by the Executive Committee.
- 7. If a separate department is established for Computer Science courses, faculty members, where appropriate, will be given the option of transferring to this department.
- 8. The Executive Committee will recommend to Engineering Faculty Council the establishment of a Computer Science committee to advise the Executive Committee on the co-ordination and development of Computer Science courses. The terms of reference of this committee are suggested in Part IV.

## IV. SUGGESTED TERMS OF REFERENCE OF COMPUTER SCIENCE COMMITTEE

1. The membership on the Committee will be those full-time faculty teaching computer science courses, the Director of the Computer Center and not more than 3 others designated by the Faculty Council.

- IV. Suggested terms of reference of Computer Science Committee (cont'd)
  - 2. The Faculty Council will appoint the Chairman.
  - 3. The Committee will report to the Executive Committee.
  - 4. The Committee will recommend to the Executive Committee on the co-ordination of Computer Science courses, development of the curriculum, and the establishment of priorities.
  - 5. The Committee will be responsible for advising students seeking admission to Computer Science courses.

### SIR GEORGE WILLIAMS UNIVERSITY



MONTREAL 25, CANADA

### NOTICE

The Faculty of Engineering at Sir George Williams
University invites applications for two faculty positions in
the area of Computer Science. Candidates are expected to
teach courses in Computer Science as well as in related
areas in the Engineering undergraduate and graduate (Master
and Doctoral) programmes. Preference will be given to those
who hold advanced degrees in Computer Science and who also
have an engineering background. Salary and rank commensurate with qualifications and experience.

Write:

Dean Jack Bordan, Faculty of Engineering, Sir George Williams University, MONTREAL 107, Quebec.

MPduP/eg

January 21st, 1969